

# Cigarette Butts as litter



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"How inappropriate to call this planet  
Earth, when clearly it is Ocean."

--Arthur C. Clarke

# International Coastal Cleanup *in Virginia for 18 years*



# Data collection and dissemination about litter

**ITEMS COLLECTED**

Please pick up all debris that you find. Only record information for the items listed below.  
Keep a count of your items using tick marks and enter the item total in the box.  
Example: ☒ Beverage Cans HHH III

**SHORELINE AND RECREATIONAL ACTIVITIES**  
(Debris from fast food, beach-goers, sports/games, festivals, litter from streets/storm drains, etc.)

<input type="checkbox"/> Bags (paper or plastic)	<input type="checkbox"/> Cups, Plates, Forks, Knives, Spoons
<input type="checkbox"/> Balloons	<input type="checkbox"/> Food Wrappers/Containers
<input type="checkbox"/> Beverage Bottles (plastic) 2 liters or less	<input type="checkbox"/> Pull Tabs
<input type="checkbox"/> Beverage Bottles (glass)	<input type="checkbox"/> 6-Pack Holders
<input type="checkbox"/> Beverage Cans	<input type="checkbox"/> Shotgun Shells/Wadding
<input type="checkbox"/> Caps, Lids	<input type="checkbox"/> Straws, Stirrers
<input type="checkbox"/> Clothing, Shoes	<input type="checkbox"/> Toys

**OCEAN/WATERWAY ACTIVITIES**  
(Debris from recreational/commercial fishing and boat/yacht operations)

<input type="checkbox"/> Bait Containers/Packaging	<input type="checkbox"/> Fishing Nets
<input type="checkbox"/> Bleach/Cleaner Bottles	<input type="checkbox"/> Light Bulbs/Tubes
<input type="checkbox"/> Buoys/Floats	<input type="checkbox"/> Oil/Lube Bottles
<input type="checkbox"/> Crab/Lobster/Fish Traps	<input type="checkbox"/> Pallets
<input type="checkbox"/> Dates	<input type="checkbox"/> Plastic Sheeting/Tarps
<input type="checkbox"/> Fishing Line	<input type="checkbox"/> Rope
<input type="checkbox"/> Fishing Lures/Light Sticks	<input type="checkbox"/> Strapping Bands

**SMOKING-RELATED ACTIVITIES**

<input type="checkbox"/> Cigarettes/Cigarette Filters	<input type="checkbox"/> Appliances (refrigerators, washers, etc.)
<input type="checkbox"/> Cigarette Lighters	<input type="checkbox"/> Batteries
<input type="checkbox"/> Cigar Tips	<input type="checkbox"/> Building Materials
<input type="checkbox"/> Tobacco Packaging/Wrappers	<input type="checkbox"/> Cars/Car Parts
	<input type="checkbox"/> 55-Gal. Drums
	<input type="checkbox"/> Tires

**MEDICAL/PERSONAL HYGIENE**

<input type="checkbox"/> Condoms	<input type="checkbox"/> Debris Items of Local Concern
<input type="checkbox"/> Diapers	(Identify and count 3 other items found that concern you)
<input type="checkbox"/> Syringes	
<input type="checkbox"/> Tampons/Tampon Applications	


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Photo: The Ocean Conservancy

What have we learned  
over the years  
of collecting data in Virginia?

Take a guess...

## Top 15 items in 15 years

<b>Cigarettes</b>	<b>15 %</b>
Beverage bottles (plastic)	13 %
Food wrappers/containers	11 %
Bags	10 %
Beverage cans	9 %
Glass bottles	9 %
Cups, plates, knives, forks, spoons	7 %
Caps, lids	6 %
Straws, stirrers	3 %
Building materials	2 %
Balloons	2 %
Clothing, shoes	1 %
Fishing line	1 %
Rope	1 %
<b>Tobacco packaging/wrappers</b>	<b>1 %</b>

## Top 15 Items Over 15 Years



■ Food &  
Beverage

■ Smoking  
related

■ Bags

■ Everything  
Else!



WHY are so many  
cigarette butts  
littered outside?



Photos: Clean Virginia Waterways



Things have changed



Workplace smoking was once the norm.



Now, smokers are outside.





Smoking by entrances has created issues, as have cars that no longer have ashtrays.





# Composition of cigarette filters

Toxic properties: Nicotine & other

10,000 fibers per filter: Cellulose Acetate  
(not biodegradable)



# Animal ingestion & toxins



# Solutions to littered smoking-related products

# What's been tried:

Educate – Regulate – Innovate

# Educate

## Pocket ashtrays & information to smokers





# Educate

Pocket ashtrays & information to smokers

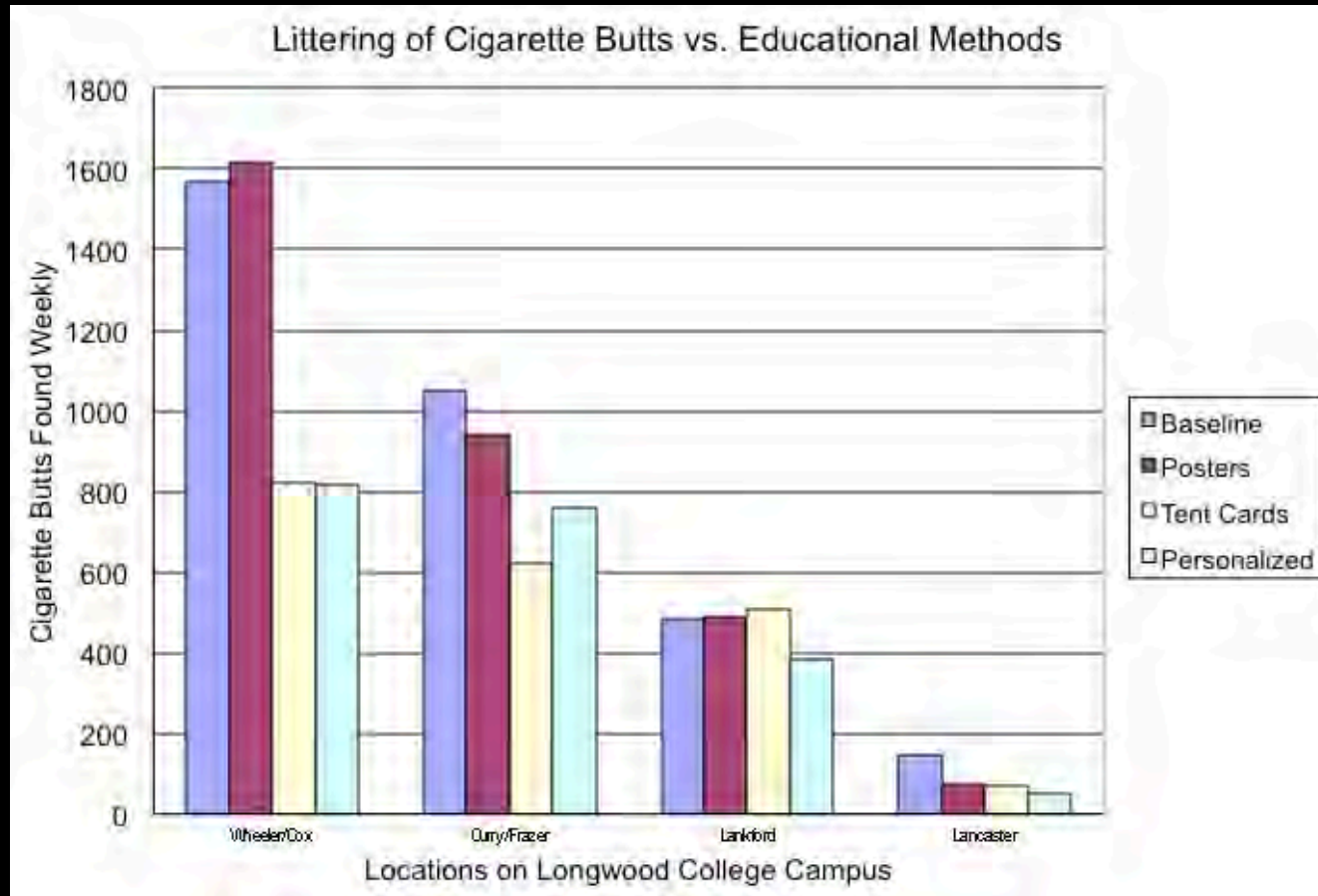


# Educate

## Pocket ashtrays & information to smokers



# Educate



Posters, signage & personal email messages reduced cigarette butt litter on a college campus by more than 50%

# Regulate

Banning smoking on beaches & in parks

Concentrating smokers

Designated smoking areas

# Law of unintended consequences

**Bans on indoor smoking** has led to smokers going outside...and increased littering of butts.

**Campus bans** can force smokers onto neighboring properties or into the street.



# Market-based solutions

Tax in San Francisco \$.20 a pack for litter

# Innovate

Make it easier to do the right thing

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Bronwen Evans,  
Director, Litter Programs

KAB.org  
PreventCigaretteLitter.org



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## **Litter in America Research**

**[WWW.KAB.ORG/RESEARCH09](http://WWW.KAB.ORG/RESEARCH09)**

This research was funded by Philip Morris USA, an Altria Company

# KEEP AMERICA BEAUTIFUL

Tobacco products:

- 38% of all roadside litter

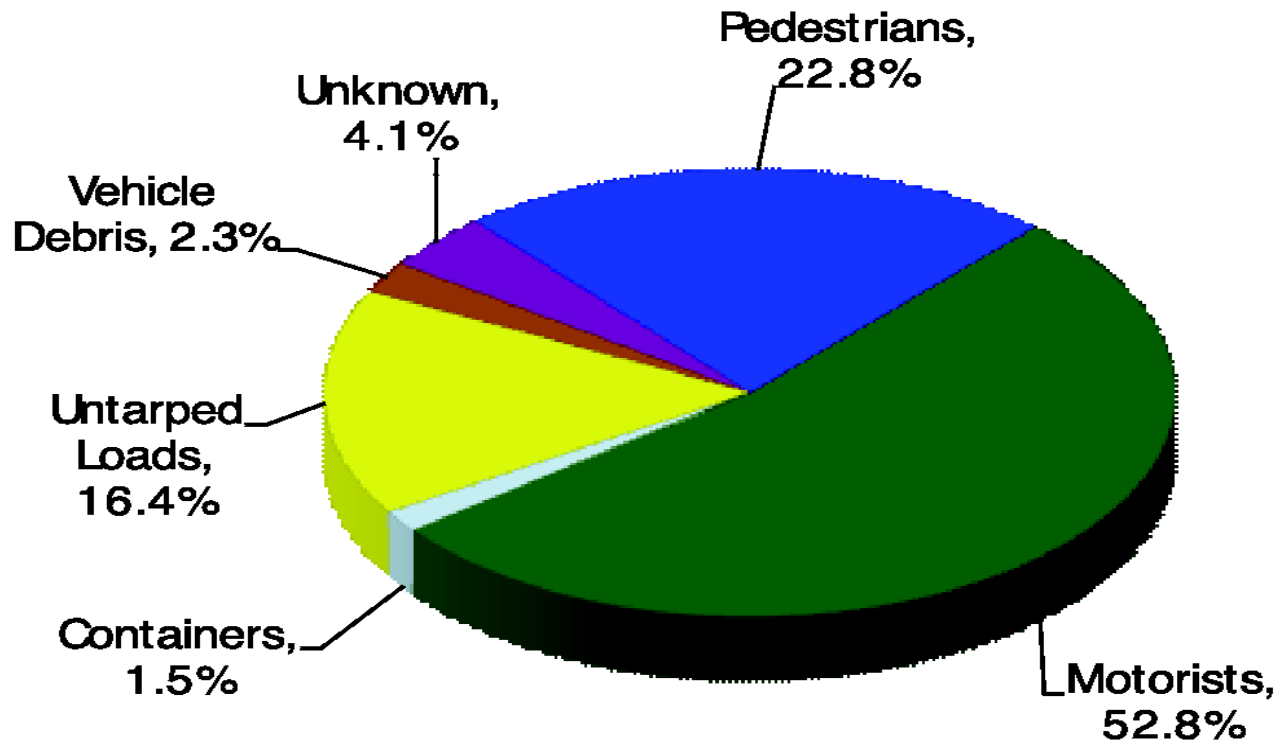
- Harmful in the environment

- Costly to clean up

- Littering rate for cigarette butts: 65%

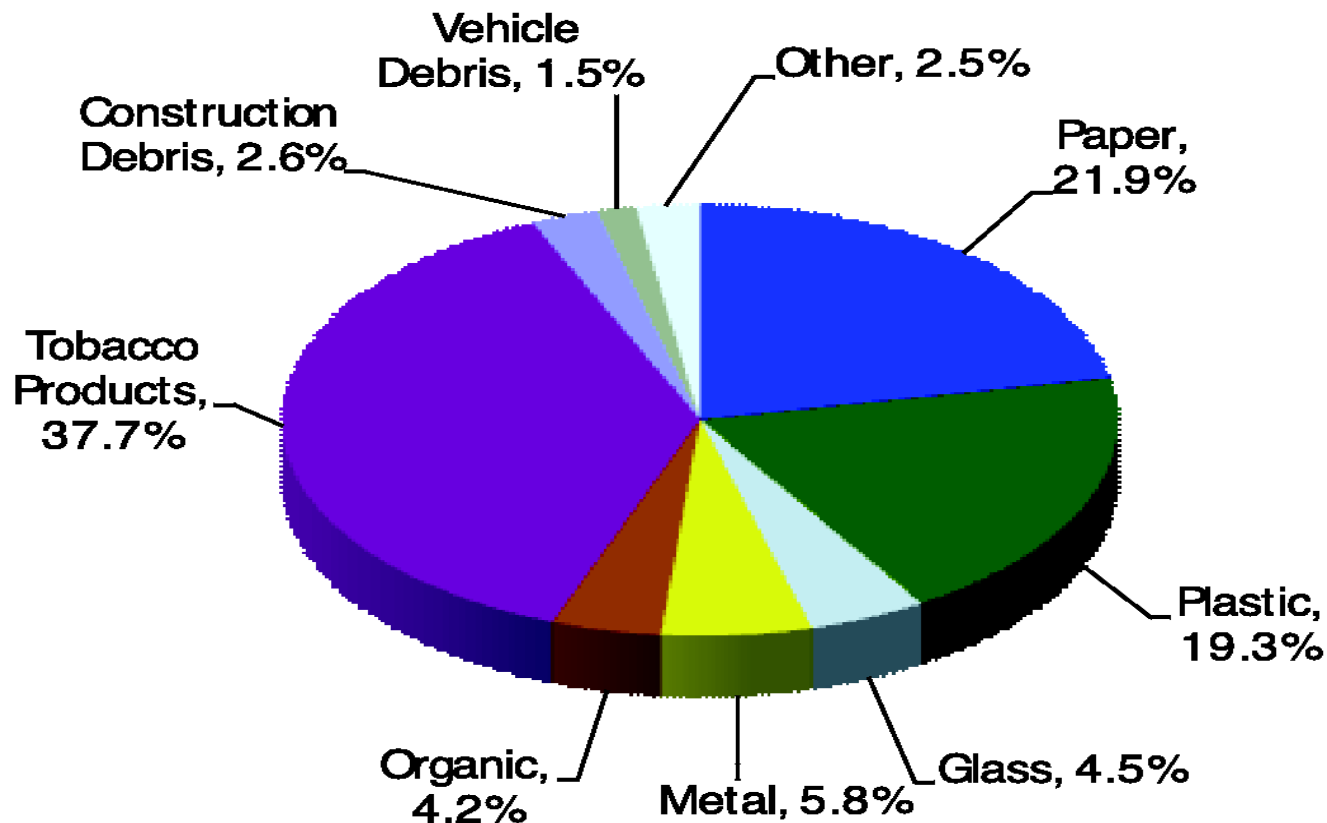


# Sources of Litter



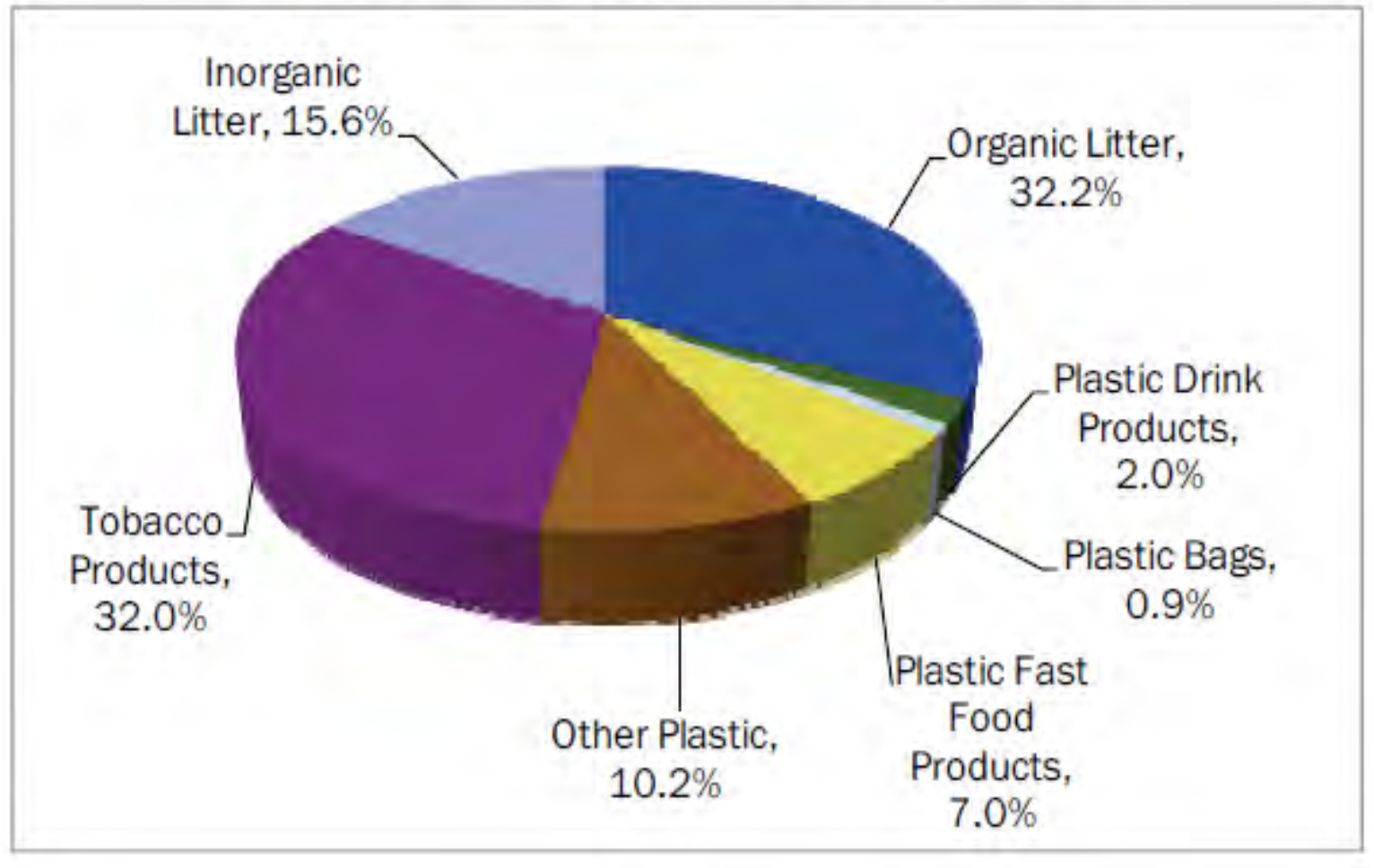
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# Composition of Litter



# Materials at Storm Drains

Figure 3-27 Plastic and Other Materials at Storm Drains



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# Storm Drain Markers



# **Cigarette Litter Prevention**

## **Strategies:**

- Review and support litter laws
- Educate the public to build awareness
- Install ash receptacles at transition points
- Distribute portable ashtrays to adult smokers

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# 2013 Grants Program



**Philip Morris USA**  
an Altria Company



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# Education





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## Signage is Key



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# Ash Receptacles are Key



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# Smoke Free Zones



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# Emerging Litter Issues



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# Emerging Litter Issues





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# Behavior Change



# Contact us



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